U. S. FOREST SERVICE

THE Forestry Sciences Laboratory at Morgantown is one of many research facilities operated by the Forest Service, U. S. Department of Agriculture.

The Forest Service is dedicated to the principle of multiple-use management of the Nation's forest resources for sustained yields of wood, water, forage, wildlife, and recreation. Through forestry research, cooperation with the States and private forest owners, and management of the National Forests and National Grasslands, it strives — as directed by Congress — to provide increasingly greater services to a growing nation.

Research plays an important role in this program. The Forest Service maintains 8 regional forest and range experiment stations and more than 90 research laboratories of various kinds. The Northeastern Forest Experiment Station, which administers the new Laboratory at Morgantown, conducts research in timber management, forest protection against insects and disease, watershed management, forest products utilization, forest resource and production analysis, forest recreation, wildlife habitat, forest products marketing, engineering and forest survey. The Northeastern Station maintains 11 experimental forests as outdoor laboratories. Station headquarters is at Upper Darby, a suburb of Philadelphia, Pennsylvania.

Through the office of State and Private Forestry, the Forest Service encourages improvement, protection, and sound management on 400 million acres of commercial forest land in the United States. These forested properties, owned by private individuals, industries, counties, municipalities, and states, account for nearly four-fifths of the Nation's forest resource.

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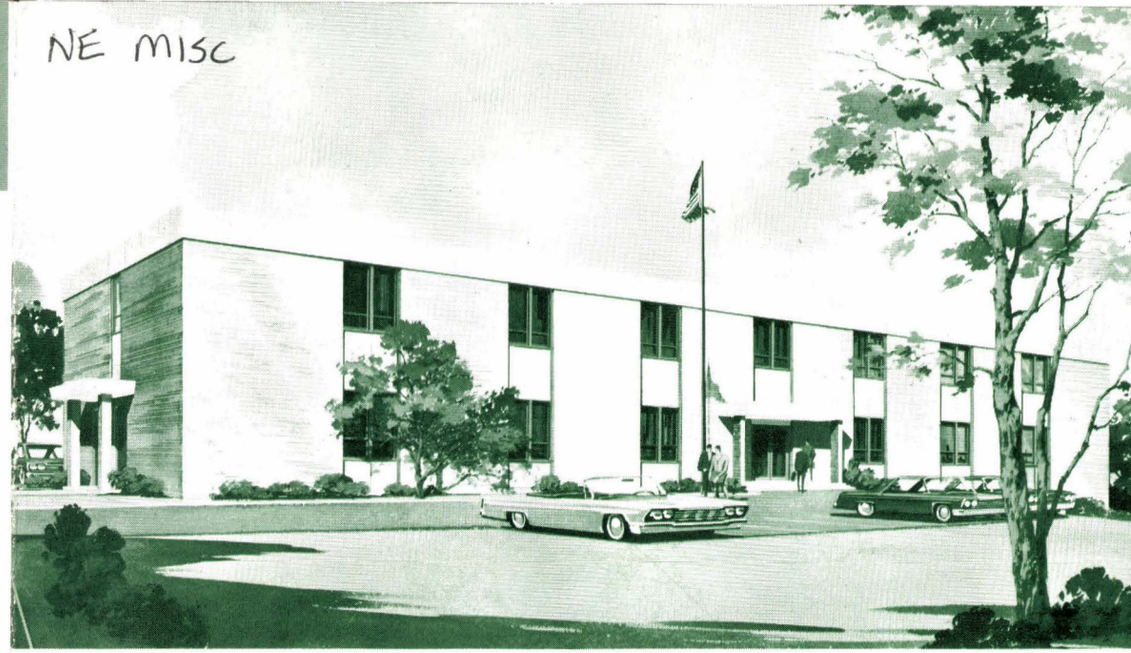


FORESTRY SCIENCE LABORATORY

AT MORGANTOWN
WEST VIRGINIA

LIBRARY
AUG 15 1967
ROCKY MOUNTAIN STATION

Conducting Research on:

Engineering
Wildlife Habitat

Housing — — —

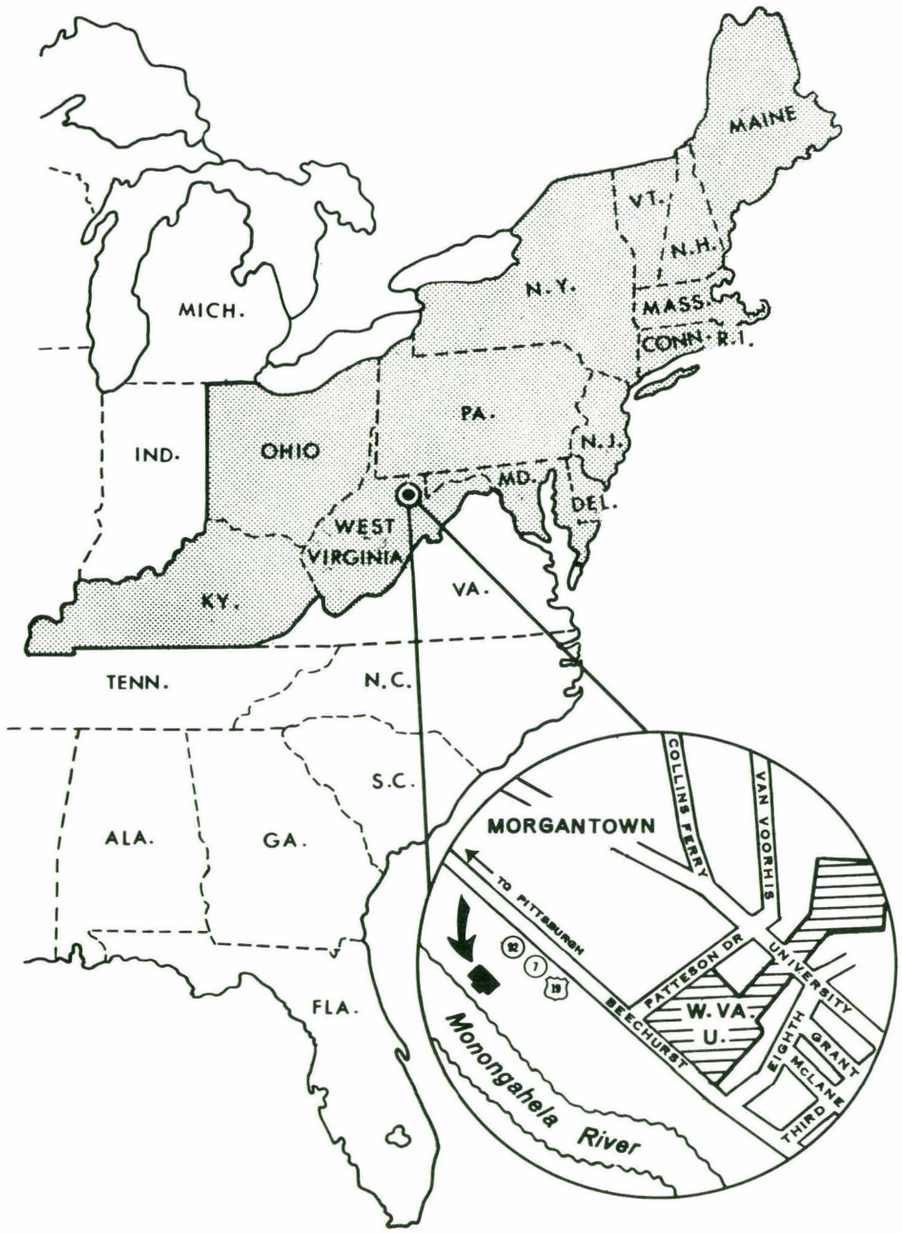
Regional State and
Private Forestry Unit

A research facility of the . . .

NORTHEASTERN FOREST EXPERIMENT STATION
FOREST SERVICE, U. S. DEPARTMENT OF AGRICULTURE

Upper Darby, Pa. R. D. Lane, Director

THE NORTHEASTERN STATION AREA AND THE FORESTRY SCIENCES LABORATORY



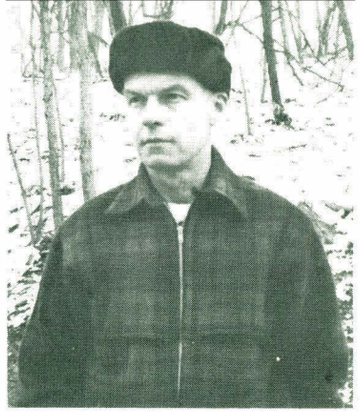
STATE AND PRIVATE UNIT

BESIDES the research scientists, a unit of the Forest Service's State and Private Forestry branch is also stationed at the new Laboratory. Working in close cooperation with state forestry agencies and with private landowners, their purpose is to help put research findings to use for improving forest-products utilization practices in a five-state area.

At the same time, they bring logging-industry problems to the attention of the researchers for consideration and possible study. This close work relationship at the Laboratory between researchers and State and Private Forestry personnel strengthens the Forest Service's effectiveness in recognizing and attacking problems and in putting research findings into practice.

One group of the State and Private Forestry unit is concerned with flood prevention and small watersheds. They are planning the forestry aspects of two river-basin surveys and numerous watershed projects in West Virginia, Ohio, Indiana, and Michigan. These activities are coordinated with State Foresters, private interests, and other Federal agencies, including the Corps of Engineers and the Soil Conservation Service.

WILDLIFE HABITAT



John D. Gill
Project Leader

THE wildlife-management scientists at the Laboratory are attempting to improve forest wildlife habitat for maximum production of deer, grouse, squirrels, and turkeys. One of the larger problems in this complex field is coordination of this forest use with other important forest uses in the Appalachians.

Because of the increasing demand for forest products, and of the application of even-aged management systems in hardwood areas, forestry and wildlife scientists together are seeking to determine the impact of timber-management activities on habitat requirements for game animals.

Problems of wildlife food yields, shelter, and breeding grounds affect and are affected by timber cutting rotations and cycles. Ultimately, research may develop management systems that yield both timber and game crops.

THE REGION AND ITS PROBLEMS

THE forest resources of Appalachia provide major opportunities for developing stable rural communities. Careful development, management, and use of these resources could improve the regional economy and help tomorrow's people, as well as today's.

The Appalachian Region produces choice hardwoods, a staple in the manufacture of fine furniture, paneling, and other wood products. The area also is the natural home for many species of valuable wildlife such as deer, grouse, squirrels, and wild turkeys.

Rich as it is in natural resources, Appalachia probably will not realize its full forest resource-utilization potential until some knotty problems are solved. For one thing, the already difficult job of logging heavy hardwood timber is further complicated by the rough terrain, which taxes both manpower and equipment.

The pressure on wildlife populations caused by an ever-increasing number of hunters adds to the difficulties of scientific wildlife management, which is already hampered by lack of basic knowledge of habitat requirements. There also is the problem of harmonizing timber production and game production.

To seek solutions to such problems, and to insure that once the solutions are found, they are applied, the U. S. Forest Service has established the new Forestry Sciences Laboratory at Morgantown.

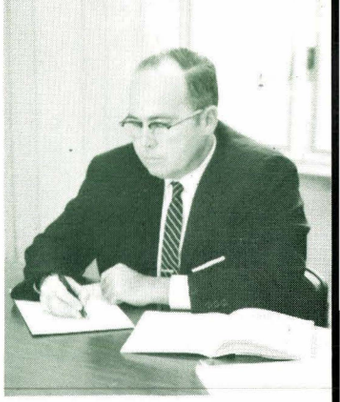
THE NEW BUILDING

THE new Forestry Science Laboratory is located on a 2.6-acre tract leased from West Virginia University by the Federal Government. It is adjacent to the University's Evansdale Campus, which contains the University's Forestry School and the Engineering and Agricultural Colleges. The location permits close cooperative research between the Federal and University scientists.

Designed by Robert J. Bennet & Associates, a Morgantown architectural firm, the $500,000 two-story building was constructed under supervision of the U. S. General Services Administration by Baker & Coombs, a Morgantown contractor. There are 23 offices for the staff of 24 scientific, technical and administrative personnel. Besides general office facilities, there is a drafting room, a conference room, a library, a wildlife laboratory, an instrument laboratory, and a photo darkroom.

The technical library houses research material for the forestry engineers and wildlife habitat scientists.

ENGINEERING



Homer W. Parker
Project Leader

ENGINEERS at the Laboratory are studying three major engineering problems: improvement of logging methods and machines, especially for Appalachian hardwoods; improvement of transporting and handling of logs; and improvement of methods and systems for utilizing low-grade timber.

A high-priority project is to determine how engineering research can improve the harvesting and transporting of primary wood products. Part of this work involves the making of scale models for estimating harvesting costs when rubber-tired skidders are used.

Several cooperative engineering research projects are under way between the Laboratory and West Virginia University. Among them are a preliminary investigation into the cutting action of chain saw teeth, a study to determine whether the use of gas generators as sources of power for portable logging tools is practical, and a study to identify and describe hydrological environmental conditions that affect logging operations in the forest.